only after an initial decision by the Presiding Officer.

§ 86.1866–12 CO_2 credits for advanced technology vehicles.

(a) Electric vehicles, plug-in hybrid electric vehicles, and fuel cell vehicles, as those terms are defined in § 86.1803–01, that are certified and produced for U.S. sale, where ''U.S.'' means the states and territories of the United States, in the 2012 through 2025 model years may use a value of zero (0) grams/mile of CO_2 to represent the proportion of electric operation of a vehicle that is derived from electricity that is generated from sources that are not onboard the vehicle, as specified by this paragraph (a).

(1) Model years 2012 through 2016: The use of zero (0) grams/mile CO_2 is limited to the first 200,000 combined electric vehicles, plug-in hybrid electric vehicles, and fuel cell vehicles produced for U.S. sale, where ''U.S.'' means the states and territories of the United States, in the 2012 through 2016 model years, except that a manufacturer that produces 25,000 or more such vehicles for U.S. sale in the 2012 model year shall be subject to a limitation on the use of zero (0) grams/mile CO_2 to the first 300,000 combined electric vehicles, plug-in hybrid electric vehicles, and fuel cell vehicles produced and delivered for sale by a manufacturer in the 2012 through 2016 model years.

(2) Model years 2017 through 2021: For electric vehicles, plug-in hybrid electric vehicles, and fuel cell vehicles produced for U.S. sale, where ''U.S.'' means the states and territories of the United States, in the 2017 through 2021 model years, such use of zero (0) grams/mile CO_2 is unrestricted.

(3) Model years 2022 through 2025: The use of zero (0) grams/mile CO_2 is limited to the first 200,000 combined electric vehicles, plug-in hybrid electric vehicles, and fuel cell vehicles produced for U.S. sale by a manufacturer in the 2022 through 2025 model years, except that a manufacturer that produces for U.S. sale 300,000 or more such vehicles in the 2019 through 2021 model years shall be subject to a limitation on the use of zero (0) grams/mile CO_2 to the first 600,000 combined electric vehicles, plug-in hybrid electric vehicles, and fuel cell vehicles produced for U.S. sale by a manufacturer in the 2022 through 2025 model years. Vehicles produced for U.S. sale in excess of these limitations will account for greenhouse gas emissions according to § 600.113(n).

(b) For electric vehicles, plug-in hybrid electric vehicles, fuel cell vehicles, dedicated natural gas vehicles, and dual-fuel natural gas vehicles as those terms are defined in § 86.1803–01, that are certified and produced for U.S. sale in the 2017 through 2021 model years and that meet the additional specifications in this section, the manufacturer may use the production multipliers in this paragraph (b) when determining the manufacturer's fleet average carbon-related exhaust emissions under § 600.512 of this chapter. Full size pickup trucks eligible for and using a production multiplier are not eligible for the performance-based credits described in § 86.1870–12(b).

(1) The production multipliers, by model year, for electric vehicles and fuel cell vehicles are as follows:

Model year	Production multiplier
2017	2.0
2018	2.0
2019	2.0
2020	1.75
2021	1.5

(2)(i) The production multipliers, by model year, for plug-in hybrid electric vehicles, dedicated natural gas vehicles, and dual-fuel natural gas vehicles are as follows:

Model year	Production multiplier
2017	1.6
2018	1.6
2019	1.6
2020	1.45
2021	1.3

(ii) The minimum all-electric driving range that a plug-in hybrid electric vehicle must have in order to qualify for use of a production multiplier is 10.2 miles on its nominal storage capacity of electricity when operated on the highway fuel economy test cycle. Alternatively, a plug-in hybrid electric vehicle may qualify for use of a production multiplier by having an equivalent all-electric driving range greater than or equal to 10.2 miles during its actual charge-depleting range as measured on

the highway fuel economy test cycle and tested according to the requirements of SAE J1711, Recommended Practice for Measuring the Exhaust Emissions and Fuel Economy of Hybrid-Electric Vehicles, Including Plug-In Hybrid Vehicles (incorporated by reference in §86.1). The equivalent all-electric range of a PHEV is determined from the following formula:

$EAER = R_{CDA} \times ((CO2_{CS} - CO2_{CD}/CO2_{CS}))$

Where:

EAER = the equivalent all-electric range attributed to charge-depleting operation of a plug-in hybrid electric vehicle on the highway fuel economy test cycle.

R_{CDA} = The actual charge-depleting range determined according to SAE J1711, Recommended Practice for Measuring the Exhaust Emissions and Fuel Economy of Hybrid-Electric Vehicles, Including Plug-In Hybrid Vehicles (incorporated by reference in §86.1).

CO_{2CS} = The charge-sustaining CO_2 emissions in grams per mile on the highway fuel economy test determined according to SAE J1711, Recommended Practice for Measuring the Exhaust Emissions and Fuel Economy of Hybrid-Electric Vehicles, Including Plug-In Hybrid Vehicles (incorporated by reference in §86.1).

CO_{2CD} = The charge-depleting CO_2 emissions in grams per mile on the highway fuel economy test determined according to SAE J1711, Recommended Practice for Measuring the Exhaust Emissions and Fuel Economy of Hybrid-Electric Vehicles, Including Plug-In Hybrid Vehicles (incorporated by reference in §86.1).

(3) The actual production of qualifying vehicles may be multiplied by the applicable value according to the model year, and the result, rounded to the nearest whole number, may be used to represent the production of qualifying vehicles when calculating average carbon-related exhaust emissions under §600.512 of this chapter.

[77 FR 63164, Oct. 15, 2012]

§86.1867–12 CO_2 credits for reducing leakage of air conditioning refrigerant.

Manufacturers may generate credits applicable to the CO_2 fleet average program described in §86.1865–12 by implementing specific air conditioning system technologies designed to reduce air conditioning refrigerant leakage over the useful life of their passenger automobiles and/or light trucks. Credits shall be calculated according to this section for each air conditioning system that the manufacturer is using to generate CO_2 credits. Manufacturers may also generate early air conditioning refrigerant leakage credits under this section for the 2009 through 2011 model years according to the provisions of §86.1871–12(b).

(a) The manufacturer shall calculate an annual rate of refrigerant leakage from an air conditioning system in grams per year according to the procedures specified in SAE J2727 (incorporated by reference in §86.1). In doing so, the refrigerant permeation rates for hoses shall be determined using the procedures specified in SAE J2064 (incorporated by reference in §86.1) The annual rate of refrigerant leakage from an air conditioning system shall be rounded to the nearest tenth of a gram per year. The procedures of SAE J2727 may be used to determine leakage rates for HFC–134a and HFO–1234yf; manufacturers should contact EPA regarding procedures for other refrigerants. The annual rate of refrigerant leakage from an air conditioning system shall be rounded to the nearest tenth of a gram per year.

(b) The CO_2-equivalent gram per mile leakage reduction used to calculate the total leakage credits generated by an air conditioning system shall be determined according to this paragraph (b), separately for passenger automobiles and light trucks, and rounded to the nearest tenth of a gram per mile:

(1) Passenger automobile leakage credit for an air conditioning system:

$$Leakage\ Credit = MaxCredit \times \left[1 - \left(\frac{LeakScore}{16.6}\right) \times \left(\frac{GWP_{REF}}{1430}\right)\right] - HiLeakDis$$